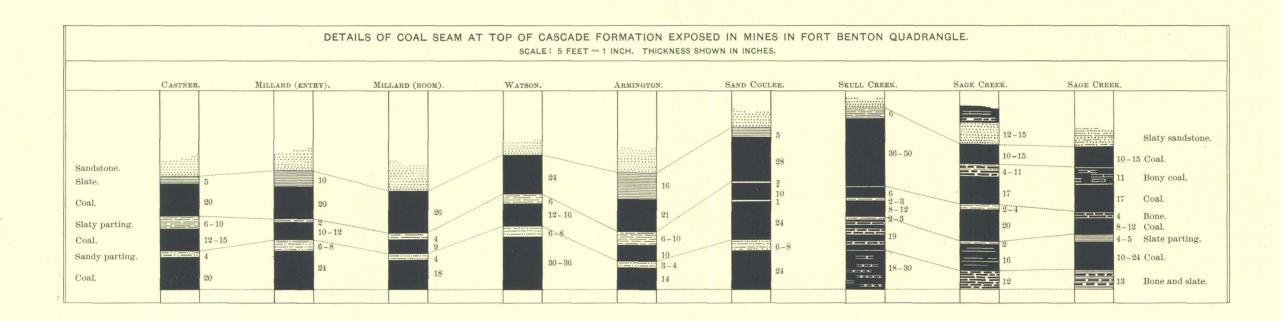
	GENERALIZED SE	ECTION O	F SEDIMENTARY	ROCKS OF LI	TTLE BELT MOUNTAINS AND HIGHWOOD MOUNTAINS IN SCALE: 1000 FEET = 1 INCH.	FORT BENTON QUADRANGLE.
PERIOD.	FORMATION NAME.	Symbol.	COLUMNAR SECTION.	THICKNESS IN FEET.	CHARACTER OF ROCKS.	CHARACTER OF TOPOGRAPHY AND SOIL.
PLEISTOCENE.	Alluvium.	Pal		0-25	Loam, gravel, and clay.	Stream bottomlands. Farming lands.
	Bench gravels.	Pbg		0-25	Gravels of local origin.	Stony open prairie. Pasture lands.
	Glacial drift and till.	Pgd	Pal Péd Pal Pbé	0-250	Bowlders of various rocks, quartzitic gravel, and loess.	Rolling hills, bowlder strewn. Pasture lands.
	Stanford conglomerate.	Ps	2 200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ps 0-100	Conglomerate and sand.	
CRETACEOUS.	Montana formation.	Km		1200-1600	Sandstone and interbedded shales. Drab shale and interbedded sandstones.	Slopes, well covered with soil, and rock ledges. Arid flats, "bad lands." Clayey soil, good farming lands where irrigated.
	Eagle formation.	Ke		200	White sandstone with coal seams and clay-ironstone nodules.	White cliffs and bench lands. Sandy soil.
	Colorado formation.	Кс		1850	Drab or lead-colored clay shale carrying round or oval concretions of gray limestone. Black shale with interbedded sandstones, and a bed of tuff. Red shale and sandstone in thin beds. Lilac-colored sandstone, red clay, and thin limestone.	"Bad lands," steep clay slopes, and muddy flats; water alkaline. Clayey soils, productive when irrigated. Good farming lands.
	Dakota formation.	Kd		180	Red shale with limestone nodules, capped by sandstone, and sandstone at the base.	Bluffs determining bench lands. Springs from sandstone at the base.
	Cascade formation.	Kcd		500	Shaly sandstone and red clay with seam of workable coal at the top. Sandstone and sandy shale.	High bench lands.
JURATRIAS.	Ellis formation.	Je		120	Sandstone with limestone at the base.	"Hog back" ridges, parallel to the mountain flanks.
CARBONIFEROUS.	Quadrant formation.	Cq		455	Green shale and interbedded limestones. Red sandstone and clay.	Ravines between mountain slopes and outer flanking ridges.
	Madison limestone.	Cm		1300	Massive, white and light-gray limestone. Thinly bedded, dark-gray and blue-gray limestone.	Steep mountain slopes, rugged peaks and cliffs, and nar row canyons. Thin but productive soil. Cliffs and mountain slopes. Rich, fertile soil,
DEVONIAN	Monarch formation.	Dm		130	Chocolate-brown and black, saccharoidal limestone.	Lower ledges in cliffs. Good soil.
(AND SILURIAN?)					Gray limestone.	
CAMBRIAN.	Barker formation.	€b	# 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	750	Greenish micaceous shale carrying interbedded layers of limestone, and conglomerate of limestone pebbles.	Bench lands formed by underlying quartzite. Fertile farming lands.
					Sandstone and quartzite.	Cliffs and bluffs. Rocky ground, rough roads.
ARCHEAN.	Gneiss and schist.	ARgn			Gneiss, carrying pink, red, and white feldspars, amphibolite, and schists.	Rounded mountain summits and steep valley slopes. Thin soils; bare, rocky exposures.



THICKNESS IN FEET.	COLUMNAR SECTION.	CHARACTER OF ROCKS.
		Black and purple shale.
10-20		Sandstone forming bench land. Shale containing limestone concretions
45-50		5 feet long, ½ to 2 feet thick, with fresh-water fossils.
40-50		Well-bedded, fissile, lavender-colored sandstone, more massive at the base.
40-55		Earthy, purple and red shales with yel low sandy lumps.
5 - 15		Sandstone.
18 - 30		Red earthy shale carrying yellow lumpy masses of sandy limestone.
15-40		Massive bed of sandstone.
6-12	7	Coal seam.

THICKNESS IN FEET.	COLUMNAR SECTION.	CHARACTER OF ROCKS.
6-12	***************************************	Coal seam.
20	#20 0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Gray and yellow shale and fire clay Laminated sandstone.
30	:\$ i o 0 & a - 0 & a a a	Sandy shale with clay-ironstone be
8		Calcareous sandstone.
60		Shale and interbedded sandstones 5 feet thick.

SECTION OF LOWER PORTION OF QUADRANT FORMATION SHOWING GYPSUM BEDS, NEAR RICEVILLE. SCALE: 100 FEET = 1 INCH.					
THICKNESS IN FEET.	COLUMNAR SECTION.	CHARACTER OF ROCKS.			
$2\frac{1}{2}$		Gypsum.			
92		Shale.			
3		Gypsum.			
22		Red and white sandstone.			
5		Gypsum.			
35		Shaly sandstone.			
11/2		Gypsum.			
25	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Sandstone with gypsum bands.			
25		Sandstone.			
$7\frac{1}{2}$		Limestone.			
30		Red and green mottled sandy clay.			
		Madison limestone.			